

Abstract of the disclosure

A composition containing nanomagnetic particles. The, nanomagnetic particles have an average particle size of less than about 100 nanometers, a saturation magnetization of from about 2 to about 2,000 electromagnetic units per cubic centimeter, a phase transition temperature of from about 40 to about 200 degrees Celsius, and a squareness of from about 0.05 to about 1.0; the average coherence length between adjacent nanomagnetic particles is less than about 100 nanometers; and the nanomagnetic particles are at least triatomic.